

REMARKS

As a preliminary matter, it does not appear that the Petition and Amendment for Correction of Inventorship filed on November 4, 2005 has been entered. Accordingly, entry of the Petition and Amendment for Correction of Inventorship, and written confirmation of such entry, is respectfully requested.

Claims 11-16 stand rejected under 35 U.S.C. §103 as being unpatentable over United States Patent No. 6,108,064 to Minoura et al. in view of United States Patent No. 6,781,759 to Wakita et al. Applicants respectfully traverse this rejection.

Applicants respectfully submit that one of ordinary skill in the art would not have arrived at the subject matter of either independent Claim 11, independent Claim 12 or independent Claim 13 by combining the Minoura et al. reference with the Wakita et al. reference because: (1) the claimed ratio of R_f/R_{lc} is not known to be a result-effective variable that would be obvious to optimize; (2) the cited references lack a disclosure or suggestion of any correlation between the ratio R_f/R_{lc} and the average tilt angle of the projections and depressions; and (3) the Minoura et al. reference fails to disclose or suggest a retardation plate with retardation in a vertical direction that results in any of the claimed ranges of the ratio R_f/R_{lc} .

First, the Examiner is reminded that it is only considered obvious to optimize a parameter that is recognized as a result-effective variable. *See* MPEP §2144.05(II)(B). As stated in MPEP 2144.05 (II)(B), “A particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the

determination of the optimum or workable ranges of said variable might be characterized as routine experimentation.” *See also In re Antonie*, 195 USPQ 6 (C.C.P.A. 1977).

The facts of *In re Antonie*, in which the court reversed a rejection based on the optimization (routine experimentation) rationale, can be analogized to the instant case. In *In re Antonie*, the court reversed a rejection for claims directed to a water treatment device where the rejection was based on the premise that it was obvious to optimize the ratio of the tank volume to a contactor area (which is the area of a set of rotating disks that contacts the liquid in the tank). Id. at 7. The prior art disclosed that changing the contactor area could increase the efficiency of the device, but it did not disclose or suggest modifying the tank volume. Id. More importantly, the prior art did not disclose or suggest that the ratio of the tank volume to the contactor area was related to the desired result of increasing efficiency, i.e., that the claimed ratio was known to be a result-effective variable.

Similarly, in the instant application, the ratio of R_f/R_{lc} (where R_f is the retardation of a retardation plate and R_{lc} is the retardation of the liquid crystal) was not previously known to be a result-effective variable. None of the cited references even mention this parameter. Thus, the cited references also fail to recognize that the parameter R_f/R_{lc} can be optimized to achieve a desired result. Accordingly, for at least this reason, Applicants respectfully request the withdrawal of this §103 rejection of independent Claims 11-13 and associated dependent Claims 14-16.

Second, the cited references lack a disclosure or suggestion of any correlation between the ratio R_f/R_{lc} and the average tilt angle of the projections and depressions.

Independent Claims 11, 12 and 13 of the present application each defined a specific correlation between the ratio R_f/R_{lc} and the average tilt angle of the projections and depressions. More specifically, Claim 11 recites that the ratio R_f/R_{lc} is not less than 0.6 nor greater than 0.6 and that the average tilt angle of the projections and depressions is not less than 4° nor greater than 6° ; Claim 12 recites that the ratio R_f/R_{lc} is not less than 0.5 nor greater than 0.8 and that the average tilt angle of the projections and depressions is not less than 7° nor greater than 9° ; and Claim 13 recites that the ratio R_f/R_{lc} is not less than 0.4 nor greater than 0.7 and that the average tilt angle of the projections and depressions is not less than 10° nor greater than 15° .

Thus, as indicated in independent Claims 11, 12 and 13, the present inventors have found that for each of three different specific ranges of the average tilt angle of the projections and depressions, a specific range of values for the ratio R_f/R_{lc} should be used. Part of the rationale used in determining the claimed sets of ranges of these two parameters was explained in Response B, pages 3-4.

In contrast, since neither the Minoura et al. reference nor the Wakita et al. reference even mention the ratio R_f/R_{lc} , it follows neither of these references disclose or suggest that for different values of the ratio R_f/R_{lc} , different average tilt angles should be used. Thus, neither of the cited references discloses or suggests the claimed correlation between different ranges of the ratio R_f/R_{lc} and the average tilt angles.

Accordingly, for this reason also, Applicants respectfully request the withdrawal of this §103 rejection of independent Claims 11-13 and associated dependent Claims 14-16.

Third, the Minoura et al. reference fails to disclose or suggest a retardation plate with retardation in a vertical direction that results in any of the claimed ranges of the ratio R_f/R_{lc} . The Minoura et al. reference discloses that the optical retardation compensation of plate 8 has a retardation of not less than 100 nm and not more than 180 nm with respect to light passing in the normal direction to the display surface. The optical retardation compensation plate 9, which has a retardation of not less than 200 nm and not more than 360 nm, is disposed on the optical retardation compensation plate 8. The plate 8 is a quarter-wave plate having a quarter the in-plane retardation, the plate 9 is a half-wave plate having half the in-plane retardation, and the combination of the plate 8 and the plate 9 composes a broadband quarter-wave plate.

Initially, the Minoura et al. reference does not mention the retardation in a direction of the thickness, i.e., in the vertical direction as in the present invention. In addition, assuming *arguendo* the Minoura et al. reference means “in the vertical direction,” as indicated in the present invention, the retardation in a direction of the thickness would be the total of retardations of the plates 8 and 9, that is, retardation (R_f) of not less than 300 nm and not more than 540 nm. Combining these values with the retardation value (R_{lc}) of a liquid crystal layer of 135 nm, the ratio R_f/R_{lc} for Minoura et al. would range from 2.22

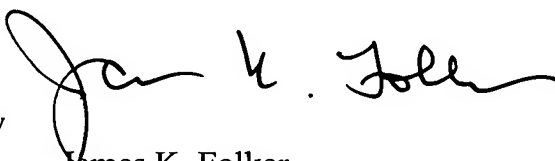
(300/135) to 4 (540/135), which is different from the retardation ranges of the present invention (0.6 to 0.9 for Claim 11; 0.5 to 0.8 for Claim 12; and 0.4 to 0.7 for Claim 13).

Accordingly, for this reason also, Applicants respectfully request the withdrawal of this §103 rejection of independent Claims 11-13 and associated dependent Claims 14-16.

For all of the above reasons, Applicants request reconsideration and allowance of the claimed invention. Should the Examiner be of the opinion that a telephone conference would aid in the prosecution of the application, or that outstanding issues exist, the Examiner is invited to contact the undersigned.

Respectfully submitted,

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